

AMENDMENTS TO THE CLAIMS

Claims 1-9. (Canceled)

10. (Withdrawn) A substrate processing method, comprising:
disposing anodes and cathodes, arranged alternately along at least one direction, so as to face a substrate held by a substrate holder;
supplying a processing liquid between said substrate, held by said substrate holder, and said anodes and cathodes; and
applying a voltage between said anodes and said cathodes.

11. (Withdrawn) The substrate processing method according to claim 10, further comprising:
rotating said substrate while applying said voltage between said anodes and cathodes.

12. (Withdrawn) The substrate processing method according to claim 10, wherein supplying a processing liquid comprises supplying a processing liquid containing an electrolyte.

13. (Withdrawn) The substrate processing method according to claim 10, further comprising:
between said anodes and cathodes applying an electric current having at least one of an alternating current waveform, a direct current waveform, a direct current reverse voltage waveform, a pulse waveform, a PR pulse waveform, and a double pulse waveform.

14. (Withdrawn) The substrate processing method according to claim 10, wherein a distance between said substrate held by said substrate holder and said anodes differs from a distance between said substrate held by the substrate holder and said cathodes.

15. (Withdrawn) The substrate processing method according to claim 10, wherein supplying a processing liquid comprises supplying said processing liquid to said substrate from a supply port provided in one of

(i) each of said anodes, and

(ii) each of said cathodes,

while processing liquid supplied to said substrate is sucked via a suction port provided in the other one of

(i) each of said anodes, and

(ii) each of said cathodes.

Claim 16-19. (Canceled)

20. (Currently Amended) A substrate processing apparatus, comprising:
a processing liquid supply section for supplying a processing liquid onto a substrate;
a micro-bubble generator for generating micro-bubbles in the processing liquid; and
an ultrasonic transducer for emitting ultrasonic waves to the processing liquid containing the micro-bubbles so as to collapse the micro-bubbles.

21. (Previously Presented) The substrate processing apparatus according to claim 20, wherein said micro-bubbles generator is for generating micro-bubbles having a diameter of not more than 20 μm and an internal pressure of not lower than atmospheric pressure.

22. (Previously Presented) The substrate processing apparatus according to claim 20, wherein said micro-bubble generator comprises one of a two-fluid nozzle, a gas diffuser, a gas/liquid stirrer, and an electrolytic gas generator.

23. (Previously Presented) The substrate processing apparatus according to claim 20, further comprising:

a substrate holder for holding a substrate; and
a rotating mechanism for rotating the substrate when held by said substrate holder;
wherein said ultrasonic transducer is disposed such that it faces the substrate when held
by said substrate holder.

24. (Previously Presented) The substrate processing apparatus according to claim 23,
wherein said ultrasonic transducer has a processing liquid introduction port, and the processing
liquid is to be supplied through said processing liquid introduction port to between the substrate,
when held by the substrate holder, and said ultrasonic transducer.

25. (Previously Presented) The substrate processing apparatus according to claim 20,
wherein said ultrasonic transducer is for emitting ultrasonic waves having a frequency of from 5
to 100 MHz.

26. (Previously Presented) A substrate processing apparatus, comprising:
a substrate holder for holding and rotating a substrate;
a rotary plate disposed opposite to one of front and back surfaces of the substrate when
held by said substrate holder, said rotary plate being arranged at a predetermined distance from
the substrate, when held by said substrate holder, so as to form a circular processing space
therebetween; and

a first fluid supply section for supplying a first processing fluid to fill the circular
processing space with the first processing fluid.

27. (Previously Presented) The substrate processing apparatus according to claim 26,
wherein said substrate holder and said rotary plate are to rotate in opposite directions.

28. (Previously Presented) The substrate processing apparatus according to claim 26,
wherein the first processing fluid is an etching liquid.

29. (Previously Presented) The substrate processing apparatus according to claim 26, further comprising:

a counter plate disposed opposite to the other one of the front and back surfaces of the substrate, when held by said substrate holder, at a predetermined distance therefrom, and

a second fluid supply section for supplying a second processing fluid between the substrate, when held by said substrate holder, and said counter plate.

30. (Previously Presented) The substrate processing apparatus according to claim 29, wherein said counter plate is rotatable.

31. (Previously Presented) The substrate processing apparatus according to claim 30, wherein said counter plate is to rotate in a direction opposite to a rotational direction of said substrate holder.

32. (Previously Presented) The substrate processing apparatus according to claim 29, wherein the second processing fluid is an etching liquid.

33. (Previously Presented) The substrate processing apparatus according to claim 29, wherein said counter plate is rotatable.